# **Product Datasheet**

# GAPDH Antibody (13H12) - BSA Free NBP2-27103

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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## NBP2-27103

GAPDH Antibody (13H12) - BSA Free

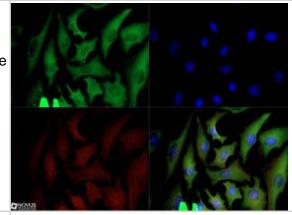
GAPDH Antibody (13H12) - BS	SA Free
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	13H12
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	36 kDa
<b>Product Description</b>	
Host	Mouse
Gene ID	2597
Gene Symbol	GAPDH
Species	Human, Mouse, Rat, Drosophila, Monkey, Primate, Sheep
Reactivity Notes	Based upon 91% sequence similarity with immunogen, this antibody is predicted to react with Guinea Pig, Sheep, Squirrel, Porcine/Pig, Ferret, Canine/Dog/Cat, Bovine, Reptile / Rattlesnake and several other species. Immunogen shows 82% similarity to Xenopus and Zebrafish. Rat, sheep, and monkey reactivity reported in scientific literature (PMID: 24796753, PMID: 27618403, and PMID: 24462973 respectively).
Marker	Cytosolic Marker
Immunogen	Amino acids between 275 and 325 of glyceraldehyde 3-phosphate dehydrogenase protein were used as the immunogen for this GAPDH antibody.
<b>Product Application Details</b>	
Applications	Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.25 - 1 ug/ml, Simple Western 1:25, Immunohistochemistry 5 ug/ml, Immunocytochemistry/Immunofluorescence 1:10, Immunohistochemistry-Paraffin 5 ug/ml
Application Notes	GAPDH is a widely used loading control for quantitative Western blotting. In IHC-P, the staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.  In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size West Sulv (Regard Supply Reported in a verified
	point. Separated by Size-Wes, Sally Sue/Peggy Sue. WB reported in a verified



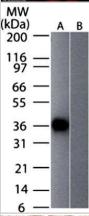
customer review.

#### **Images**

Immunocytochemistry/Immunofluorescence: GAPDH Antibody (13H12) [NBP2-27103] - GAPDH antibody was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). A dilution of 1:10 was used. Image objective 40x.



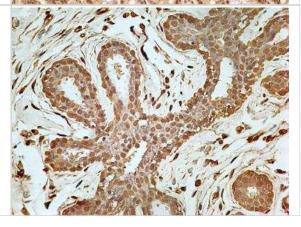
Western Blot: GAPDH Antibody (13H12) [NBP2-27103] - WB detection of GAPDH protein (theoretical molecular weight: 36 kDa) in HeLa cells lysate using GAPDH antibody (clone 13H12) in (A) the absence and (B) the presence of immunizing peptide.



Immunohistochemistry-Paraffin: GAPDH Antibody (13H12) [NBP2-27103] - IHC-P detection GAPDH protein in a formalin-fixed paraffinembedded section of human rectal carcinoma tissue using GAPDH antibody (clone 13H12) at 5 ug/ml concentration.



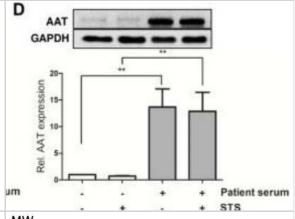
Immunohistochemistry-Paraffin: GAPDH Antibody (13H12) [NBP2-27103] - IHC-P detection GAPDH protein in a formalin-fixed paraffinembedded section of normal human breast tissue using GAPDH antibody (clone 13H12) at 5 ug/ml concentration.



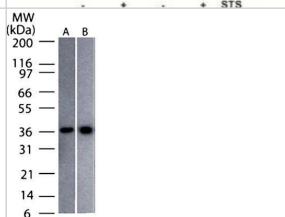
Western Blot: GAPDH Antibody (13H12) [NBP2-27103] -Characterization of IncR492. (B) Northern blot of IncR494 using increasing amounts of loaded total. Black arrow signifies IncR492specific signal at approximately 1400 bp. A probe targeting Gapdh mRNA served as the loading control. (D) RT-PCR analysis of IncR492 and Gapdh expression. RNA extract was treated with a 5'-phosphatedependent exonuclease, resulting in a degradation of f.ex. ribosomal RNA. Citation: Winzi M, Casas Vila N, Paszkowski-Rogacz M, Ding L, Noack S, Theis M, et al. (2018) The long noncoding RNA IncR492 inhibits neural differentiation of murine embryonic stem cells. PLoS ONE

13(1): e0191682. https://doi.org/10.1371/journal.pone.0191682

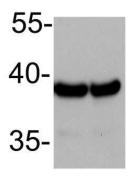
Western Blot: GAPDH Antibody (13H12) [NBP2-27103] - Serum from trauma patients induces intrinsic apoptosis resistance by up-regulating AAT expression in neutrophils. AAT protein expression was analyzed in neutrophils after 18 h of culture by western blot analysis. Relative expression was quantified vs. GAPDH expression. One representative blot of five independent experiments is depicted. \*\*p<0.01 (one-way ANOVA with Newman keuls post-hoc test). Image collected and cropped by CiteAb from the following publication (http://dx.plos.org/10.1371/journal.pone.0177450), licensed under a CC-BY license.



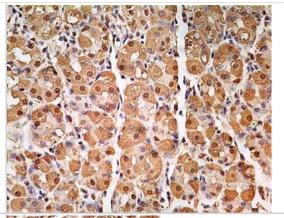
Western Blot: GAPDH Antibody (13H12) [NBP2-27103] - WB detection of GAPDH protein (theoretical molecular weight 36 kDa) in lysates of Mouse cell lines (A) NIH 3T3 (B) RAW 264.7 using GAPDH antibody (clone 13H12) at a concentration of 0.25 ug/ml.



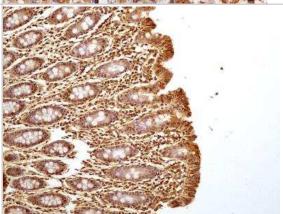
Western Blot: GAPDH Antibody (13H12) [NBP2-27103] - analysis of GAPDH in HeLa and HEK 293 cells (25ug/lane) using anti-GAPDH antibody. Image from verified customer review.



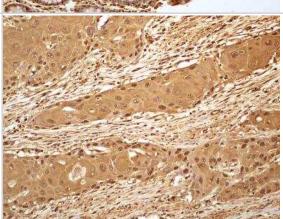
Immunohistochemistry-Paraffin: GAPDH Antibody (13H12) [NBP2-27103] - IHC-P detection GAPDH protein in a formalin-fixed paraffinembedded section of normal human stomach tissue using GAPDH antibody (clone 13H12) at 5 ug/ml concentration.



Immunohistochemistry-Paraffin: GAPDH Antibody (13H12) [NBP2-27103] - IHC-P detection GAPDH protein in a formalin-fixed paraffinembedded section of human colon tissue using GAPDH antibody (clone 13H12) at 5 ug/ml concentration.



Immunohistochemistry-Paraffin: GAPDH Antibody (13H12) [NBP2-27103] - IHC-P detection GAPDH protein in a formalin-fixed paraffinembedded tissue section of human esophageal squamous cell carcinoma (SCC) using GAPDH antibody (clone 13H12) at 5 ug/ml concentration.



Simple Western: GAPDH Antibody (13H12) [NBP2-27103] - GAPDH/G3PDH Antibody (13H12) [NBP2-27103] - Simple Western lane view shows a specific band for GAPDH in 0.1 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



#### **Publications**

Lin X, Fu B, Xiong Y et al. Unconventional secretion of unglycosylated ORF8 is critical for the cytokine storm during SARS-CoV-2 infection PLoS pathogens 2023-01-01 [PMID: 36689483] (WB)

Venkatramanan, S, Ibar, C Et al. TRIP6 is required for tension at adherens junctions. J Cell Sci 2021-03-11 [PMID: 33558314] (IF/IHC, Mouse)

Grotheer V, Skrynecki N, Oezel L et al. Osteogenic differentiation of human mesenchymal stromal cells and fibroblasts differs depending on tissue origin and replicative senescence Scientific reports 2021-06-07 [PMID: 34099837] (WB, Human)

Krassovka JM, Suschek CV, Prost M et al. The impact of non-toxic blue light (453 nm) on cellular antioxidative capacity, TGF-beta 1 signaling, and myofibrogenesis of human skin fibroblasts J. Photochem. Photobiol. B, Biol. 2020 -07-06 [PMID: 32659647] (WB, Human)

Srinivas C, Ramaiah MJ, Lavanya A et al Novel EPE Analogue Modulates Expression of Angiogenesis Associated microRNAs and Regulates Cell Proliferation by Targeting STAT3 in Breast Cancer PLoS ONE 2015-11-10 [PMID: 26551008] (WB, Human)

Modi, A;Singh, M;Gutti, G;Shanker, OR;Singh, VK;Singh, S;Singh, SK;Pradhan, S;Narayan, G; Benzothiazole derivative bearing amide moiety induces p53-mediated apoptosis in HPV16 positive cervical cancer cells Invest New Drugs 2019-08-20 [PMID: 31432292] (WB, Human)

Srivastava, S;Battu, MB;Khan, MZ;Nandicoori, VK;Mukhopadhyay, S; Mycobacterium tuberculosis PPE2 Protein Interacts with p67phox and Inhibits Reactive Oxygen Species Production J. Immunol. 2019-09-01 [PMID: 31375544] (WB, Mouse)

Eiraku, N;Chiba, N;Nakamura, T;Amir, MS;Seong, CH;Ohnishi, T;Kusuyama, J;Noguchi, K;Matsuguchi, T; BMP9 directly induces rapid GSK3-β phosphorylation in a Wnt-independent manner through class I PI3K-Akt axis in osteoblasts FASEB J. 2019-07-31 [PMID: 31365832]

Sarabhai Theresia, Peter Christoph, Bar Anne-Kathrin et al. Serum alpha-1 Antitrypsin (AAT) antagonizes intrinsic apoptosis induction in neutrophils from patients with systemic inflammatory response syndrome. PloS One 2017-05-11 [PMID: 28493974] (WB, Human)

Mishra P, Paital B, Jena S et al. Possible activation of NRF2 by Vitamin E/Curcumin against altered thyroid hormone induced oxidative stress via NF kappa B/AKT/mTOR/KEAP1 signalling in rat heart Sci Rep 2019-05-15 [PMID: 31092832] (WB, Rat)

van Deel ED, Octavia Y, de Waard MC et al. Exercise Training Has Contrasting Effects in Myocardial Infarction and Pressure Overload Due to Divergent Endothelial Nitric Oxide Synthase Regulation Int J Mol Sci 2018-07-06 [PMID: 29986381]

Padhy B, Hayat B, Paramita GG et al. Pseudoexfoliation and Alzheimer's associated CLU risk variant, rs2279590 lies within an enhancer element and regulates CLU, EPHX2 and PTK2B gene expression. Human Molecular Genetics 2017-08-26 [PMID: 28973302] (WB, Human)

More publications at <a href="http://www.novusbio.com/NBP2-27103">http://www.novusbio.com/NBP2-27103</a>





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## **Products Related to NBP2-27103**

NBP2-30234 Human Multi-tissue Tissue MicroArray (Cancer)

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NB720-B Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]

NBP1-43319-0.5mg Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)

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